A new species of *Autolyca* STÅL, 1875 from El Salvador (Phasmatodea: Pseudophasmatidae, Anisomorphini)

Oliver Zompro and Frank Hennemann

Oliver Zompro, Max-Planck-Institut für Limnologie, AG Tropenökologie, August-Thienemann-Strasse 2, D-24306 Plön, Germany; e-mail: zompro@mpil-ploen.mpg.de

Frank Hennemann, Reiboldstrasse 11, D-67251 Freinsheim, Germany; e-mail: Frank_Hennemann@t-online.de

Abstract: A new species of Phasmatodea, *Autolyca daemonia* sp. n., is described from El Salvador. It is closely related to the type-species *Autolyca pallidicornis* STÅL, 1875, but differs in its annulated antennae and the comparably shorter legs. The holotype δ is housed in the Forschungsinstitut und Natur-Museum Senckenberg, Frankfurt am Main (SMF-no. Phas-8).

Key words: Phasmatodea, *Autolyca daemonia* Zompro & Hennemann sp. n., El Salvador.

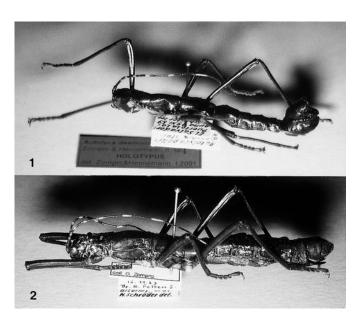
Eine neue Art der Gattung Autolyca STÅL, 1875 aus El Salvador (Phasmatodea: Pseudophasmatidae, Anisomorphini)

Zusammenfassung: Eine neue Art der Phasmatodea, *Autolyca daemonia* sp. n., wird aus El Salvador beschrieben. Sie steht der Typusart der Gattung, *Autolyca pallidicornis* Stål, 1875, nahe, unterscheidet sich aber in den geringelten Antennen und den kürzeren Beinen. Der & Holotypus befindet sich im Forschungsinstitut und Natur-Museum Senckenberg, Frankfurt am Main.

Introduction

When examining the Phasmatodea type specimens of Johann Jacob Kaup in the Hessisches Landesmuseum, Darmstadt [HLDH], and the Forschungsinstitut und Natur-Museum Senckenberg, Frankfurt am Main [SMF] (Zompro in press), both in Germany, the authors traced a series of a new species of *Autolyca* Stål, 1875, from El Salvador, which is described below.

The types are housed in SMF and the collection of Oliver



Figs. 1–2: *Autolyca daemonia.* **Fig. 1:** 3, holotype. **Fig. 2:** 9, paratype.

ZOMPRO, which is affiliated with the Zoological Museum of the Christian-Albrechts-University in Kiel.

One pair bears an interesting note taken by its collector W. Deininger on its labels. According to this note he observed approximately 300 specimens lumped together, with at least one pair in copula, on a tree log in the Laguna de Cuscatian on 20. October 1958.

Autolyca daemonia sp. n.

Holotype: &, "El Salvador: Puerto La Laguna, 29. xi. [19]59, O. Schuster leg."; "Autolyca discornis Stål, H. Schröder det." [SMF, no. Phas-8].

Paratypes (5 ♂♂, 10 ♀♀), all El Salvador: 1 ♂, 1 ♀, Laguna de Cuscatian, 20. x. 1958, W. Deininger leg.; "Autolyca pallidicornis Stål, H. Schröder det."; "20. x. 1958. In Paarung. Traube von etwa 300 Tieren auf Baumstamm in der Lagune de Cuscatian" [SMF]. 2 ♂♂, 5 ♀♀, Südhang, Izalco, 16. xi. 1953, Dr. H. Felten, S. [SMF]. 1 ♀, Str. n. Sta. Tecla, km 31,35, 4. xi. 1952, Felten S. [SMF]. 1 ♂, 1 ♀, Puerto La Laguna, 29. xi. 1959, O. Schuster leg.; "Autolyca discornis Stål, H. Schröder det." [SMF]. 1 ♀, zw. Cindad Arce u. El Congo, 650 m, 10. xi. 1952, Dr. H. Felten leg. [SMF]. 1 ♂, Puerto La Laguna, 29. xi. 1959 O. Schuster leg. 1 ♀, 1 egg ex abdomen: Südhang Izalco, 16. xi. 1953, Dr. H. Felten S. [OZ No. 450-1, 2].

Derivatio nominis: "daemonia", latinized Q form of "demonio", the Spanish word for "demon", drawing attention to the nocturnal activity of the species.

Note: The name "discornis" on determination labels is a *nomen nudum*, it has not been published by StåL.

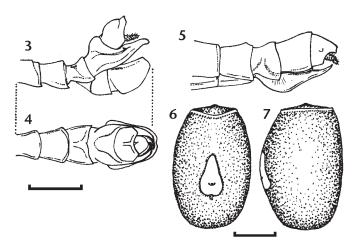
Diagnosis

A typical species of *Autolyca* Stål, 1875, closely related to the type species of this genus, *Autolyca pallidicornis* Stål, 1875, but differing in the annulated antennae, which are uniformly yellow in *pallidicornis*, the \eth anal segment and the comparably shorter legs.

Description

Colour uniformly black, shiny, antennae annulated.

d: Head subglobose, smooth, between antennae with deep impression, this with a longitudinal carina inside. Eyes projecting hemispherically, their diameter as wide as the length of the genae behind them. Between compound eyes three ocelli, standing in a triangle. Scapus roundedly rectangular, apically thickened; pedicellus cylindrical, more than two thirds of the scapus width and half as long. Following segments elongated, but of irregular length, most of them annulated, anterior half yellow, some totally black or yellow. Antennae projecting, laid back, beyond abdominal segment VIII.



Figs. 3–7: Autolyca daemonia. Fig. 3: ♂, paratype, terminal abdominal segments, lateral. Fig. 4: ♂, paratype, abdominal segment X, posterior view. Fig. 5: ♀, paratype, terminal abdominal segments, lateral. Fig. 6: Egg, dorsal. Fig. 7: Egg, lateral.

Prothorax as long as head, neither anteriorly nor posteriorly marginated, anterolateral angles with prominent glands, roundly marginated laterally. In the middle impressed transversally, in its anterior half with a point-like median and two submedian impressions. Mesothorax one third longer than prothorax, saddle-shaped, with broad, but indistinct lateral margins. Metathorax as long as posterior part of prothorax behind transversal impression, wider than long, in the posterolateral angles with a structure that seems to be rudimental alae, because something like a poorly developed venation is present.

Profemora indistinctly curved basally, subrectangular in cross-section, edges rounded. Protibiae quadrate in cross-section, slightly longer than profemora. Small area apicalis present. Tarsal segments one- to four-bristled. Probasitarsus twice as long as second tarsite, third half as long as second, fourth half as long as third. Terminal segment straight, as long as previous three segments combined, claws strongly curved, arolium comparably small. Meso- and metafemora rounded rectangular in cross-section, tibiae quadrate, longer than femora, tarsi as in forelegs, but more compact.

Median segment indistinctly separated from metathorax, transverse, slightly less than twice as long as metathorax. Stigmata positioned beside it, directed upwards. Abdominal segments II to V of equal length, VI to VII increasingly shorter. II quadrate, slightly shorter than median segment, III to VIII trapezoidal, dilatating posteriorly, segments II to VIII distinctly marginated. VIII folded transversally, as long as VII. Lateral margins of IX strikingly elongated, anterior half directed downwards, with subacute ends, posterior half surrounding X. Tergite divided by a deep fold mediotransversally. X w-shaped posteriorly, in the posterior half submedially with some small, flat impressions. Supraanal plate thick, oval,

smooth, hidden under posterior margin of X. Vomer slender, with long apex. Cerci prominent, strongly curved. Subgenital plate bulgy, in the posterior third with median carina.

Q: Larger and compacter than \mathcal{S} , but agreeing in most of the characters. Antennae projecting, laid back beyond abdominal segment IV. Abdominal segments I to V increasingly broader, V broadest segment, VIII to X of equal width, VIII as long as X, IX slightly longer, posterolateral angles of VIII projecting, acute. Posterior half of X slightly tectiform. Cerci small, curved. Subgenital plate bulgy in anterior half, posterior half flat, broad triangular, with median impression.

Measurements of imagines (length): Holotype σ : body: 45.0 mm, head: 4.2 mm, prothorax: 4.2 mm, mesothorax: 6.4 mm, metathorax: 2.8 mm, median segment: 2.5 mm, profemora: 12.6 mm, protibiae: 12.2 mm, mesofemora: 10.9 mm, mesotibiae: 11.0 mm, metafemora: 14.8 mm, metatibiae: 14.0 mm. — Paratypes: $\sigma \sigma$: body: 43.0–46.0 mm, head: 4.0–4.2 mm, prothorax: 3.9–4.2 mm, mesothorax: 6.0–7.2 mm, metathorax: 2.5–2.9 mm, median segment: 2.5–2.9 mm, profemora: 11.0–12.5 mm, protibiae: 11.0–11.9 mm, mesofemora: 1.5–10.8 mm, mesotibiae: 10.0–10.7 mm, metafemora: 14.4–14.8 mm, metatibiae: 13.9–14.3 mm. — ρ : body: 52.0–56.5 mm, head: 5.1–5.6 mm, prothorax: 5.0–6.0 mm, mesothorax: 7.8–8.8 mm, metathorax: 3.8–4.2 mm, median segment: 2.8–3.8 mm, profemora: 12.7–14.0 mm, protibiae: 11.9–15.0 mm, mesofemora: 12.0–13.6 mm, mesotibiae: 11.5–14.4 mm, metafemora: 15.5–17.5 mm, metatibiae: 14.5–18.7 mm.

Egg: Capsule brown, suboval, laterally depressed, irregularly punctured. Operculum oval, punctured, flat, but middle slightly elevated. Micropylar plate short, one third as long as capsule, slightly projecting, elongate cordiform, indistinctly marginated, lighter in colour, micropylar cup projecting, median line short, almost invisible but present. Measurements: length 4.35 mm, width 2.70 mm, height 2.90 mm.

Acknowledgements

The authors wish to thank Dr. Wolfgang A. Nässig (SMF) for access to the collection in Frankfurt am Main and Oskar Conle for helpful discussions about the identity of the new species.

References

Stål, C. (1875): Recensio Orthopterorum. Revue critique des Orthoptères décrits par Linné, de Geer et Thunberg. — Stockholm (P. A. Norstedt & Söner), 105 pp.

Zompro, O. (2001, in press): The type-material of the insect order Phasmatodea, described by Johann Jacob Kaup (Insecta, Phasmatodea). — Senckenbergiana biologica, Frankfurt am Main, 81: in press.

Received: 12. III. 2001